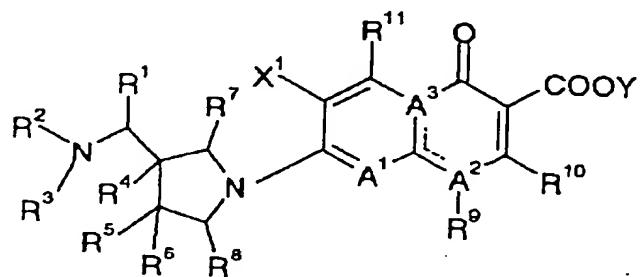


## ABSTRACT

This invention provides a quinolone derivative having potent antibacterial activity against various bacteria including drug-resistant strains which is a compound of the following formula wherein R<sup>1</sup> is an optionally substituted aromatic group, a salt of the same or a hydrate of both.



In the formula,  $R^2$ ,  $R^3$ : hydrogen atom, an alkyl group;  $R^4$ ,  $R^5$ ,  $R^6$ : hydrogen atom, hydroxyl group, a halogen atom, carbamoyl group, an alkyl group, an alkoxy group, an alkylthio group;  $R^7$ ,  $R^8$ : hydrogen atom, an alkyl group;  $R^9$ : an alkyl group, an alkenyl group, a halogenoalkyl group, a cyclic alkyl group, an aryl group, a heteroaryl group, an alkoxy group having from 1 to 6 carbon atoms, an alkylamino group;  $R^{10}$ : hydrogen atom, an alkylthio group;  $R^{11}$ : hydrogen atom, amino group, hydroxyl group, thiol group, a halogenomethyl group, an alkyl group, an alkenyl group, an alkynyl group, an alkoxy group;  $X^1$ : halogen atom, a hydrogen atom;  $A^1$ : nitrogen atom,  $C-X^2$ ;  $X^2$ : hydrogen atom, amino group, a halogen atom, cyano group, a halogenomethyl group, a halogenomethoxy group, an alkyl group, an alkenyl group, an alkynyl

group, an alkoxy group;  $A^2$ ,  $A^3$ :  $>C=C(-A^1=)-N(-R^9)-$ ,  $>N-C(-A^1=)=C(-R^9)-$ ;  
 $R^{10}$  and  $R^9$  or  $R^9$  and  $X^2$  may be integrated to form a ring structure;  
and  $Y$ : hydrogen atom, ester forming group.